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A., H. [NL/NL]; Laan van Wateringeveld 1418, NL-2671 DG The Hague (NL). VAN MARREWIJK, Leo; \*

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(74) Agent: MACKNIGHT, Kamrin, T.; Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA 94304 (US).

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(71) Applicants (for all designated States except US): GENENCOR INTERNATIONAL, INC. [US/US]; 925 Page Mill Road, Palo Alto, CA 94304 (US). THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, 36 45202 (US).

(72) Inventors; and

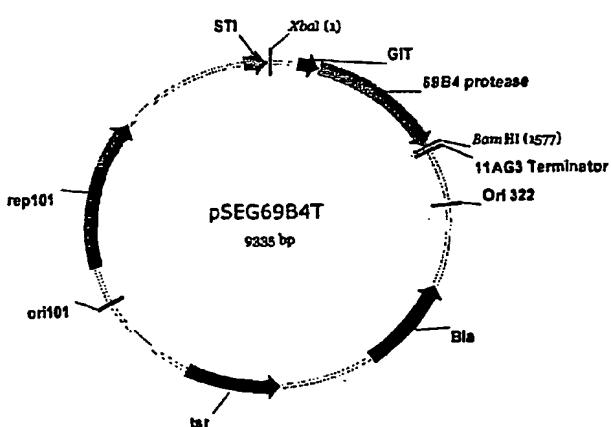
(75) Inventors/Applicants (for US only): JONES, Brian, Edward [GB/NL]; Gravin Juliana van Stolberglaan 24, NL-2263 VA Leidschendam (NL). KOLKMAN, Marc [NL/NL]; Linnaeushof 25, NL-2341 PA Oegstgeest (NL). LEEFLANG, Chris [NL/NL]; Granaathorst 345, NL-2592 SZ The Hague (NL). OH, Hiroshi [JP/US]; 8541 Meadow Bluff Court, Cincinnati, OH 45249 (US). POULOSE, Ayrookaran, J. [US/US]; 2848 Wakefield Drive, Belmont, 5 94002 (US). SADLOWSKI, Eugene, S. [US/US]; 9980 Pebbleknoll Drive, Cincinnati, OH 45252 (US). SHAW, Andrew [GB/US]; 2560 Hyde Street, San Francisco, 5 94109 (US). VAN DER KLEIJ, Wilhelmus,

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(54) Title: SERINE PROTEASES, NUCLEIC ACIDS ENCODING SERINE ENZYMES AND VECTORS AND HOST CELLS INCORPORATING SAME



(57) Abstract: The present invention provides novel serine proteases, novel genetic material encoding these enzymes, and proteolytic proteins obtained from Micrococcineae spp., including but not limited to Cellulomonas spp. and variant proteins developed therefrom. In particular, the present invention provides protease compositions obtained from a Cellulomonas spp., DNA encoding the protease, vectors comprising the DNA encoding the protease, host cells transformed with the vector DNA, and an enzyme produced by the host cells. The present invention also provides cleaning compositions (e.g., detergent compositions), animal feed compositions, and textile and leather processing compositions comprising protease(s) obtained from a Micrococcineae spp., including but not limited to Cellulomonas spp. In alternative embodiments, the present invention provides mutant (i.e., variant) proteases derived from the wild-type proteases described herein. These mutant proteases also find use in numerous applications.

WO 2005/052146 A2